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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 13

<i>Complete If Known</i>	
Application Number	10/661,402
Filing Date	09/12/2003
First Named Inventor	Andrew Vaillant
Group Art Unit	1614 1648
Examiner Name	Sharon /test
Attorney Docket Number	029849-0207

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

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<i>SH</i>	A2	AGRAWAL and KANDIMALLA, "Antisense and/or Immunostimulatory Oligonucleotide Therapeutics," <i>Current Cancer Drug Targets</i> 1:197-209 (2001)	
<i>SH</i>	A3	ALLEN and CHONN, "Large Unilamellar Liposomes with Low Uptake into the Reticuloendothelial System," <i>FEBS Letters</i> 223(1):42-46 (1987)	
<i>SH</i>	A4	ARCHAMBAULT, <i>et al.</i> , "Phosphorothioate oligonucleotides inhibit the replication of lentiviruses and type D retroviruses, but not that of type C retroviruses," <i>Arch Virol</i> 139:97-109 (1994)	

Examiner Signature	Sharon Hart	Date Considered	2-17-2006
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				Group Art Unit	1614
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<i>SH</i>	A5	BERKOW, et al., "Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)," <i>The Merck Manual of Diagnosis and Therapy</i> , 15 th ed., 2499-2506 and 46-49 (1987)	
<i>SH</i>	A6	BLUME and CEVC, "Liposomes for the sustained drug release in vivo," <i>Biochimica et Biophysica Acta</i> 1029:91-97 (1990)	
<i>SH</i>	A7	BRUNTON, "Section VI Drugs Affecting Gastrointestinal Function," <i>The Pharmacological Basis of Therapeutics</i> 9(38):934-935 (1996)	
<i>SH</i>	A8	BUUR, et al., "Penetration of 5-Fluorouracil and Prodrugs Across the Intestine of the Albino Rabbit: Evidence for Shift in Absorption Site from the Upper to the Lower Region of the Gastrointestinal Tract by Prodrugs," <i>Journ. of Controlled Release</i> 14:43-51 (1990)	
<i>SH</i>	A9	CAMPBELL and REIN, "In Vitro Assembly Properties of Human Immunodeficiency Virus Type 1 Gag Protein Lacking the p6 Domain," <i>Journ. of Viro.</i> 73:2270-2279 (1999)	
<i>SH</i>	A10	CEVC, et al., "Ultraflexible vesicles, Transfersomes, have an extremely low pore penetration resistance and transport therapeutic amounts of insulin across the intact mammalian skin," <i>Biochimica et Biophysica Acta</i> 1368:201-215 (1998)	
<i>SH</i>	A11	CHENG, et al., "Interactions Between Single-Stranded DNA Binding Protein and Oligonucleotide Analogs with Different Backbone Chemistries," <i>Journ. Mol. Recognition</i> 10:101-107 (1997)	
<i>SH</i>	A12	CONSTANTINIDES, et al., "Formulation and Intestinal Absorption Enhancement Evaluation of Water-in-Oil Microemulsions Incorporating Medium-Chain Glycerides," <i>Pharmaceutical Res.</i> 11:1385-1390 (1994)	
<i>SH</i>	A13	CROOKE, et al., "Pharmacokinetic Properties of Several Novel Oligonucleotide Analogs in mice," <i>Journ. Pharm. and Experim. Therap.</i> 277(2):923-937 (1996)	
<i>SH</i>	A14	CROOKE, S., "Progress in Antisense Technology: The End of the Beginning," <i>Meth. in Enzym.</i> 313:3-45 (1999)	

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<i>BH</i>	A15	Du PLESSIS, et al., "Topical Delivery of Liposomally Encapsulated Gamma-Interferon," <i>Antivir. Res.</i> 18:259-265 (1992)			
<i>BH</i>	A16	EL-HARIRI, et al., "The Mitigating Effects of Phosphatidylcholines on Bile Salt- and Lysophosphatidylcholine-induced Membrane Damage," <i>J. Pharm. Pharmacol.</i> 44:651-654 (1992)			
<i>BH</i>	A17	ENGLISCH and GAUSS, "Chemically Modified Oligonucleotides as Probes and Inhibitors," <i>Angewandte Chemie</i> 30(6):613-722 (1991)			
<i>BH</i>	A18	FENG, et al., "Reversible Binding of Recombinant Human Immunodeficiency Virus Type 1 Gag Protein to Nucleic Acids in Virus-Like Particle Assembly In Vitro," <i>Journ. of Viro.</i> 76(22):11757-11762 (2002)			
<i>BH</i>	A19	FENNEWALD, et al., "Inhibition of herpes simplex virus in culture by oligonucleotides composed entirely of deoxyguanosine and thymidine," <i>Antiviral Res.</i> 26:37-54 (1995)			
<i>BH</i>	A20	GABIZON, et al., "Liposome formulations with prolonged circulation time in blood and enhanced uptake by tumors," <i>Proc. Natl. Acad. Sci. USA</i> 85:6949-6953 (1988)			
<i>BH</i>	A21	GOA, et al., "Effect of Phosphorothioate Homo-oligodeoxynucleotides on Herpes Simplex Virus Type 2-induced DNA Polymerase," <i>Journ. of Biol. Chem.</i> 264(19):11521-11526 (1989)			
<i>BH</i>	A22	GAO, et al., "Inhibition of Herpes Simplex Virus Type 2 Growth by Phosphorothioate Oligodeoxynucleotides," <i>Antimicrobial Agents and Chemotherapy</i> 34(5):808-812 (1990)			

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<i>Sh</i>	A23	HIGUCHI, et al., "Particle Phenomena and Course Dispersions," <i>Remington's Pharmaceutical Sciences</i> 21:301-329 (1985)			
<i>Sh</i>	A24	HO, et al., "Preparation of Microemulsions Using Polyglycerol Fatty Acid Esters as Surfactant for the Delivery of Protein Drugs," <i>Journ. of Pharm. Sci.</i> 85:138-143 (1996)			
<i>Sh</i>	A25	HU, et al., "Topical delivery of cyclosporine A from non-ionic liposomal systems: an <i>in vivo/in vitro</i> correlation study using hairless mouse skin," <i>S.T.P. Pharma Sciences</i> 4(6):466-469 (1994)			
<i>Sh</i>	A26	ILLUM and DAVIS, "The organ uptake of intravenously administered colloidal particles can be altered using a non-ionic surfactant (Poloxamer 338)," <i>FEBS</i> 1212 167:79-82 (1984)			
<i>Sh</i>	A27	INAGAWA, et al., "Inhibition of human immunodeficiency virus type 1 replication by P-stereodefined oligo (nucleoside phosphorothioate)s in a long-term infection model," <i>FEBS Lett.</i> 528:48-52 (2002)			
<i>Sh</i>	A28	JAIRATH, et al., "Inhibition of respiratory syncytial virus replication by antisense oligodeoxyribonucleotides," <i>Antiviral Res.</i> 33:201-213 (1997)			
<i>Sh</i>	A29	JARRETT, H., "Affinity chromatography with nucleic acid polymers," <i>J. Chromatography</i> 618:315-339 (1993)			
<i>Sh</i>	A30	KABANOV, et al., "A new class of antivirals: antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus-specific proteins in MDCK cells," <i>FEBS Lett.</i> 259:327-330 (1990)			

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<i>Sh</i>	A31	KANDIMALLA, et al., "Effects of Phosphorothioate Oligodeoxyribonucleotide and Oligoribonucleotides on Human Complement and Coagulation," <i>Bioorg. & Med. Chem. Lett.</i> 8:2103-2108 (1998)			
<i>Sh</i>	A32	KEAN, et al., "Inhibition of Herpes Simplex Virus Replication by Antisense Oligo-2'-0-methylribonucleoside Methylphosphonates," <i>Biochemistry</i> 34:14617-14620 (1995)			
<i>Sh</i>	A33	KLIBANOV, et al., "Amphiphatic polyethyleneglycols effectively prolong the circulation time of liposomes," <i>FEBS Lett.</i> 268:235-237 (1990)			
<i>Sh</i>	A34	KLIMUK, et al., "Enhanced Anti-Inflammatory Activity of a Liposomal Intercellular Adhesion Molecule-1 Antisense Oligodeoxynucleotide in an Acute Model of Contact Hypersensitivity," <i>Journ. of Pharm. & Exper. Ther.</i> 292:480-488 (2000)			
<i>Sh</i>	A35	KOOL, E., "Replacing the Nucleobases in DNA with Designer Molecules," <i>Acc. Chem. Res.</i> 35:936-943 (2002)			
<i>Sh</i>	A36	LAVIGNE et al., "Is antisense an appropriate nomenclature od design for oligodeoxynucleotides aimed at the inhibition of HIV-1 replication?" <i>AAPS PharmSci</i> , 4:1-11, 2002			
<i>Sh</i>	A37	LEBEDEVA and STEIN, "Antisense Oligonucleotides: Promise and Reality," <i>Annu. Rev. Pharmacol. Toxicol.</i> 41:403-419 (2001)			
<i>Sh</i>	A38	LEE, et al., "Mucosal Penetration Enhancers For Facilitation of Peptide and Protein Drug Absorption," <i>Crit. Rev. in Ther. Drug Carrier Syst.</i> 8(2):91-192 (1991)			

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<i>SH</i>	A39	LERNER, et al., "A Six-Month Trial of Valacyclovir in the Epstein-Barr Virus Subset of Chronic Fatigue Syndrome: Improvement in Left Ventricular Function," <i>Drugs of Today</i> 38(8): 549-561 (2002)		
<i>SH</i>	A40	LETSINGER, et al., "Cholesteryl-conjugated oligonucleotides: Synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture," <i>Proc. Natl. Acad. Sci. USA</i> 86:6553-6556 (1989)		
<i>SH</i>	A41	MANOHARAN, et al., "Chemical Modifications to Improve Uptake and Bioavailability of Antisense Oligonucleotides," <i>Ann. N.Y. Acad. Sci.</i> 660:306-309 (1992)		
<i>SH</i>	A42	MANOHARAN, et al., "Introduction of a Lipophilic Thioether Tether in the Minor Groove of Nucleic Acids for Antisense Applications," <i>Bioorg. & Med. Chem. Letters</i> 3:2765-2770 (1993)		
<i>SH</i>	A43	MANOHARAN, et al., "Cholic Acid-Oligonucleotide Conjugates for Antisense Applications," <i>Bioorg. & Med. Chem. Lett.</i> 4:1053-1060 (1994)		
<i>SH</i>	A44	MANOHARAN, et al., "Oligonucleotide Conjugates: Alteration of the Pharmacokinetic Properties of Antisense Agents," <i>Nucleosides & Nucleotides</i> 14(3-5):969-973 (1995)		
<i>SH</i>	A45	MANOHARAN, et al., "Lipidic Nucleic Acids," <i>Tetrahedron Lett.</i> 36:3651-3654 (1995)		
<i>SH</i>	A46	MARHSALL, et al., "Inhibition of human immunodeficiency virus activity by phosphorodithioate oligodeoxycytidine," <i>Proc. Natl. Acad. Sci. USA</i> 89:6265-6269 (1992)		

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<i>Sh</i>	A47	MARSHALL and CARUTHERS, "Phosphorodithioate DNA as a Potential Therapeutic Drug," <i>Science</i> 259:1564-1570 (1993)			T ⁶
<i>Sh</i>	A48	MATSUKURA et al., "Antisense phosphorothioates as antivirals against human immunodeficiency virus (HIV) and hepatitis B virus (HBV)," <i>Toxicology Letters</i> , 82/83: 435-538, 1995.			
<i>Sh</i>	A49	MATSUKURA, et al., "Phosphorothioate Analogs of Oligodeoxynucleotides: Inhibitors of Replication and Cytopathic Effects of Human Immunodeficiency Virus," <i>Proc. Natl. Acad. of Sciences of USA</i> 84:7706-7710 (1987)			
<i>Sh</i>	A50	MISHRA, et al., "Improved leishmanicidal effect of phosphorothioate antisense oligonucleotides by LDL-mediated delivery," <i>Biochimica et Biophysica Acta</i> 1264:229-237 (1995)			
<i>Sh</i>	A51	MIYANO-KUROSAKI et al., "Inhibition of HTLV-I induction and virus-induced syncytia formation by oligodeoxynucleotides." <i>Virus Genes</i> , 12:205-217, 1996.			
<i>Sh</i>	A52	MIYAO, et al., "Stability and Pharmacokinetic Characteristics of Oligonucleotides Modified at Terminal Linkages in Mice," <i>Antisense Res. & Dev.</i> 5:115-121 (1995)			
<i>Sh</i>	A53	MONTEITH, et al., "Preclinical Evaluation of the Effects of a Novel Antisense Compound Targeting C-raf Kinase in Mice and Monkeys," <i>Toxicolog. Sciences</i> 46:365-375 (1998)			
<i>Sh</i>	A54	MORRIS, et al., "High Affinity Ligands from <i>in vitro</i> Selection: Complex Targets," <i>Proc. Natl. Acad. Sci. USA</i> 95:2902-2907 (1998)			

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<i>Sh</i>	A55	MURANISHI, S., "Absorption Enhancers," <i>Crit. Rev. in Ther. Drug Carr. Syst.</i> 7:1-33 (1990)			
<i>Sh</i>	A56	NANDI, et al., "DNA-induced Partial Unfolding of Prion Protein Leads to its Polymerisation to Amyloid," <i>J. Mol. Biol.</i> 322:153-161 (2002)			
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<i>Sh</i>	A60	ORUM and WENGEL, "Locked nucleic acids: A promising molecular family for gene-function analysis and antisense drug development," <i>Curr. Op. in Molecular Ther.</i> 3:239-243 (2001)			
<i>Sh</i>	A61	PAN et al., "Isolation of virus-neutralizing RNAs from a large pool of random sequences." <i>Proc. Nat. Acad. Sci. USA</i> , 92:11509-11513, 1995.			
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Examiner Signature	<i>Shearon Heut</i>	Date Considered	<i>2-7-2006</i>
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/661,402
				Filing Date	09/12/2003
				First Named Inventor	Andrew Vaillant
				Group Art Unit	1614
				Examiner Name	
(use as many sheets as necessary)				Attorney Docket Number	029849-0207
Sheet	9	of	13		

NON PATENT LITERATURE DOCUMENTS

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<i>SH</i>	A63	PEYMAN, et al., "Inhibition of Viral Growth by Antisense Oligonucleotides Directed against the IE110 and the UL30 mRNA of Herpes Simplex Virus Type-1," <i>Biol. Chem. Hoppe-Seyler</i> 376:195-198 (1995)	
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<i>SH</i>	A66	SAISON-BEHMOARAS, et al., "Short modified antisense oligonucleotides directed against Ha-ras point mutation induce selective cleavage of the mRNA and inhibit T24 cells proliferation," <i>The EMBO Journal</i> 10:1111-1118 (1991)	
<i>SH</i>	A67	SANGHVI, Y., "Heterocyclic Base Modifications in Nucleic Acids and Their Applications in Antisense Oligonucleotides," <i>Antisense Research and Applications</i> Ch. 15:273-288 (1993)	
<i>SH</i>	A68	SCHOTT, H., "Colloidal Dispersions," <i>Remington's Pharmaceutical Sciences</i> Ch. 20:271-300 (1985)	
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Sheet	10	of	13	Attorney Docket Number	029849-0207

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<i>Sh</i>	A71	STEIN and CHENG, "Antisense Oligonucleotides as Therapeutic Agents-Is the Bullet Really Magical?" <i>Science</i> 261:1004-1012 (1993)			
<i>Sh</i>	A72	STEIN, et al., "Phosphorothioate Oligodeoxynucleotides Are Potent Sequence Nonspecific Inhibitors of De Novo Infection by HIV," <i>AIDS Res. & Human Retroviruses</i> 5:639-646 (1989)			
<i>Sh</i>	A73	STEIN, C.A., "The experimental use of antisense oligonucleotides: a guide for the perplexed," <i>J. Clin. Invest.</i> 108:641-644 (2001)			
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<i>Sh</i>	A79	TAKAKURA, et al., "Uptake Characteristics of Oligonucleotides in the Isolated Rat Liver Perfusion System," <i>Antisense & Nucleic Acid Drug Developmt.</i> 6:177-183 (1996)	
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<i>Sh</i>	A87	WANG and HUANG, "Plasmid DNA Adsorbed to pH-Sensitive Liposomes Efficiently Transforms the Target Cells," <i>Bioch. & Biophys. Res. Comm.</i> 147(3):980-985 (1987)	
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<i>SH</i>	A95	ZHOU and HUANG, "Targeted delivery of DNA by liposomes and polymers," <i>Journ. of Controlled Release</i> 19:269-274 (1992)			
<i>BN</i>	A96	International Search Report from PCT Application No. PCT/IB03/04573 dated Feb. 18, 2004.			<i>✓</i>

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